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Bottom Trawling in the Bering Sea

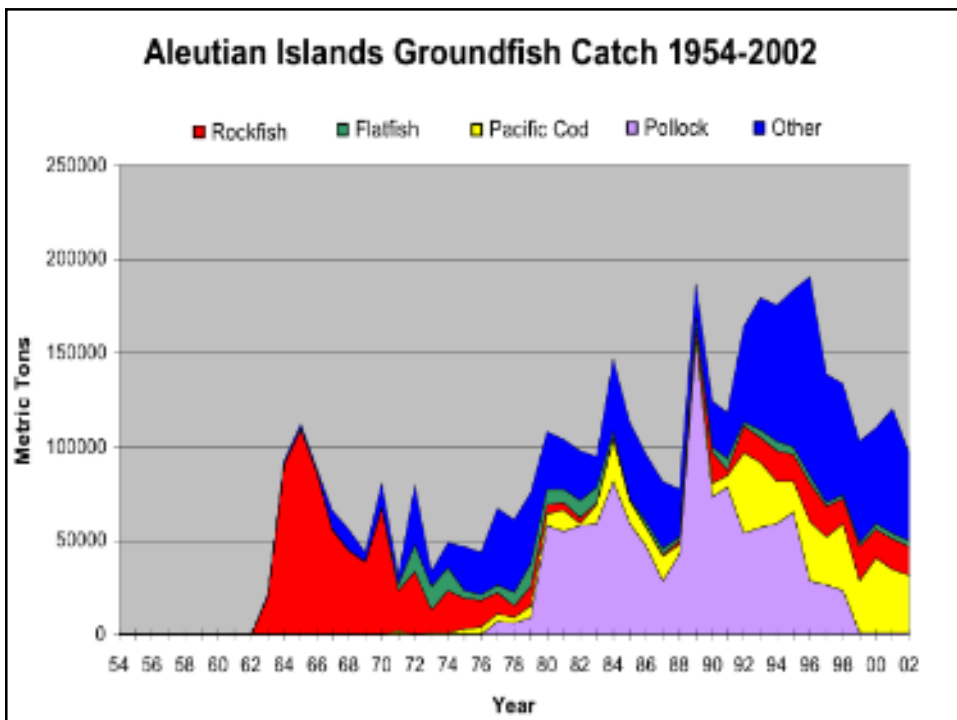


47,000 miles of coastline

336,000 square miles of fishable continental shelf

What is Bottom Trawling?

- Bottom trawling is a fishing method in which large nets are dragged across the ocean floor to catch fish
- main species targeted in bottom trawls
 - Pacific Cod
 - Rockfish
 - Atka Mackerel
 - Flatfish
 - Sablefish
 - Some Pollock
 - Halibut



Trawling Video



Gear Types

- A number of different gear types are used in trawling
 - Otter trawl
 - Roller trawl (Rockhoppers)
 - Pelagic trawls



The Issue

- Bottom trawling is known to destroy corals on the seabed. These corals are thought by many to be crucial habitat for many forms of marine life
- A number of regulations and protections are currently in place to minimize damage to the marine environment and to ensure sustainability. There is currently a shortage of evidence one way or another regarding coral's importance to the marine environment

Issues



Bycatch



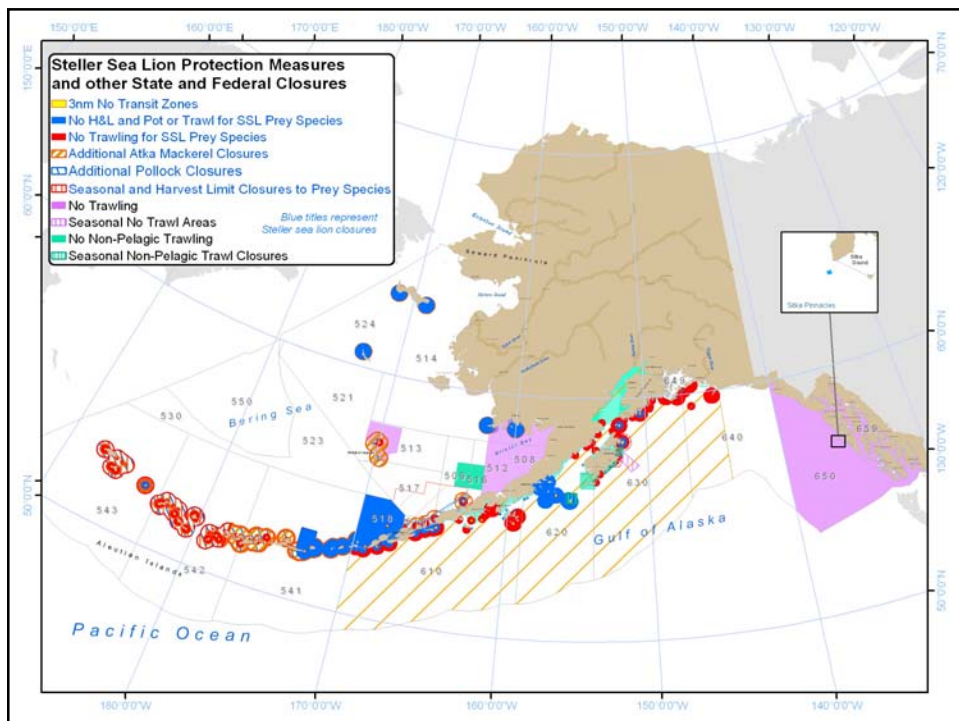
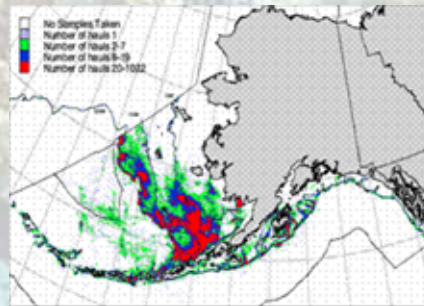
Allowable Catch



Habitat Effects

How Much is Trawled?

- Alaska has 86,051 square miles of water but only a portion of this is trawled
- The same sections of bottom are trawled over and over again
- Approximately 90% of all Alaska state waters are closed to trawling



Economics of Trawling

- Commercial fishing in Alaska contributes heavily to the local economy. In particular, many rural coastal communities depend almost entirely on the jobs provided by commercial fishing vessels and associated services



Fishery Employment

- The fishing industry is Alaska's largest private-sector employer. One-fifth of all jobs in Alaska are in some way related to the fishing industry.





Bycatch

Bycatch is the term used to describe fish that are caught accidentally while fishing for a targeted species

- Bycatch limits for 2002 Bering Sea and Aleutian Island Groundfish trawl fisheries included
 - 3,675 tonnes of halibut
 - 1,526 tonnes of herring
 - 97,000 Red King Crabs
 - 33,000 Chinook Salmon
 - 42,000 other Salmon



Habitat Effects

- When bottom trawls sweep the ocean floor, some bottom-dwelling life, corals in particular, can be swept up or destroyed.
- Trawlers do not want to hit coral, as it tears the nets and mangles the catch on the way up
- The new addition of rockhoppers has made it easier for trawlers to operate in areas with coral

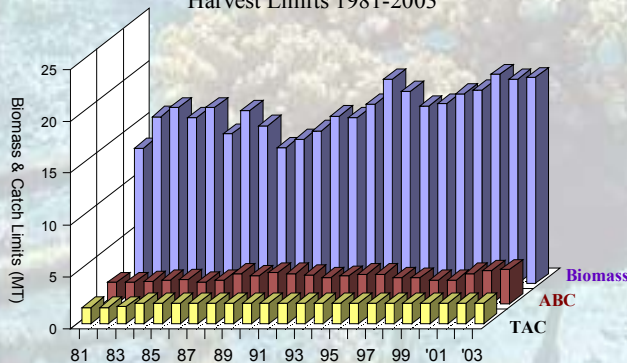




Allowable Catch

Allowable Catch is the amount of a particular species that fisheries are allowed to catch annually. Fisheries are closed for the season when harvest limits have been reached.

Bering Sea/Aleutian Islands Groundfish
Harvest Limits 1981-2003



Biomass= (amount of the species that is in the ocean)

ABC= Allowable Biological Catch (amount that can be caught without harm to the species)

TAC= Total Allowable Catch (amount that fisheries are allowed to catch)

Recommendations

- Close areas with high concentrations of corals to all bottom trawling
- Conduct EIS when expanding into new waters
- Maximise fishing in areas with demonstrated low bycatch
- Force vessels to store bycatch
- Provide financial incentives for industry to develop new gear
- Provide incentives for increased community-based fishing



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